

4) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 April 2001 (12.04.2001)

PCT

(10) International Publication Number
WO 01/24956 A1

(51) International Patent Classification⁷: **B21J 15/26,**
15/20, 15/06

GUSTAV KLAUKE GMBH [DE/DE]; Postfach 100552,
42805 Remscheid (DE).

(21) International Application Number: **PCT/GB00/03703**

(72) Inventors; and

(22) International Filing Date:
27 September 2000 (27.09.2000)

(75) Inventors/Applicants (for US only): **DEAR,** Aiden,
Robert [GB/GB]; 18 Saxon Avenue, Stotfold, Nr Hitchin,
Herts SG5 4DD (GB). **SEEWRAJ,** Angraj, Kumarj
[GB/GB]; 22 Bedwell Close, Welwyn Garden City, Herts
AL7 3XH (GB). **KING,** Richard, Paul [GB/GB]; 25
Walsingham Close, Hatfield, Herts AL10 0RP (GB).
FRENKEN, Egbert [DE/DE]; Mozartstrasse 17, 42929
Wermelskirchen (DE).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9923266.2 2 October 1999 (02.10.1999) GB

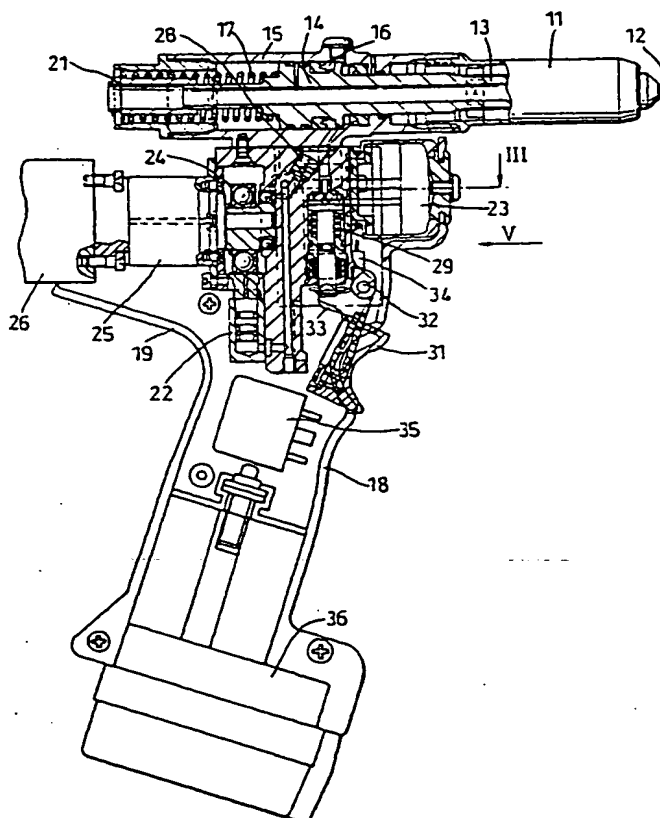
(74) Agent: **MACKENZIE,** Andrew, Bryan; Somerville &
Rushton, 45 Grosvenor Road, St. Albans, Hertfordshire
AL1 3AW (GB).

(71) Applicants (for all designated States except US): **TEX-**
TRON FASTENING SYSTEMS LIMITED [GB/GB];
Mundells, Welwyn Garden City, Herts AL7 1EZ (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,

[Continued on next page]

(54) Title: RIVETING APPARATUS



(57) Abstract: A hand-held riveting tool is driven by a battery-powered electric motor (26), and comprises a hydraulically-actuated riveting head (11), and a reciprocating hydraulic pump (22) driven by the electric motor. The tool includes a reservoir (23) for hydraulic fluid, the hydraulic supply line from the pump to the riveting head (11) being connected to the reservoir (23) by a reservoir inlet valve (29) which is normally open to allow hydraulic fluid to flow from the supply line into the reservoir (23). Operation of the tool-actuating trigger (31) firstly closes the reservoir inlet valve (29), and then switches on the electric motor (26) to operate the pump (22). Release of the tool-actuating trigger (31) firstly switches off the electric motor (26) to stop operation of the pump (22), and then opens the reservoir inlet valve (29). When the reservoir inlet valve (29) is closed by operation of the trigger (31), it acts as a pressure-relief valve to relieve over-pressure of hydraulic fluid.

WO 01/24956 A1



DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— With international search report.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.